

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions, and listings, of claims in the application:

What is claimed is:

Claims 1-14 (canceled)

15. (Previously Presented) A method for monitoring the installation of a measurement device having a measurement signal comprising:

calculating from a time series $s(t)$ of said measurement signal a characteristic variable for said measurement device;

comparing said characteristic variable with previously recorded reference values for said measurement device; and

using said comparison as the basis to automatically generate a message as to whether said measurement device has been installed according to the manufacturers instructions so as to eliminate disturbing effects.

16. (Previously Presented) The method of claim 15 where said measurement device is more than one measurement device and said measurement values related to each of said more than one measurement device are recorded in advance and associated on a device related basis to a respective one of said more than one measurement devices.

17. (Previously Presented) The method of claim 16 further comprising automatically producing from said comparison an installation standard as said message for at least one of said more than one measurement devices and indicating said message on said at least one device.

18. (Previously Presented) The method of claim 16 further comprising automatically producing from said comparison an installation standard as said message for at least

one of said more than one measurement devices and transmitting said message to a higher level system where said message is indicated.

19. (Previously Presented) The method of claim 16 wherein at least one of said more than one measurement devices are connected to a higher level system by a bus.

20. (Previously Presented) The method of claim 15 wherein said measurement device is connected to said higher level system by a bus.

21. (Previously Presented) The method of claim 15 wherein said message is generated automatically as a full text message.

22. (Previously Presented) A measurement device having a measurement signal comprising:

- a computing device comprising:

- a device for calculating a characteristic variable from a time series of said measurement signal and comparing said characteristic variable with previously recorded reference values for said measurement device; and

- a device for using said comparison as the basis to automatically generate a message as to whether said measurement device has been installed according to the manufacturers instructions so as to eliminate disturbing effects.

23. (Previously Presented) The measurement device of claim 22 further comprising a comparator for comparing said characteristic variable with previously recorded reference values for said measurement device stored in a data memory.

24. (Previously Presented) The measurement device of claim 22 further comprising a display on which said message can be indicated.

25. (Cancelled)

26. (Cancelled)

27. (Previously Presented) The measurement device of claim 26 wherein said single appliance further includes a comparator for comparing said characteristic variable with previously recorded reference values for said measurement device stored in a data memory.

28. (Previously Presented) The measurement device of claim 26 wherein said single appliance further includes a display on which said message can be indicated.

29. (Previously Presented) The measurement device of claim 25 wherein said device for calculating a characteristic variable, said device for using said comparison, said data memory and said display are at least partially physically separated from each and are connected to each other by an information system.

30. (Previously Presented) A computer program product for monitoring the installation of a measuring device, said measurement device having a measurement signal, said computer program product comprising:

- a computer readable media having instructions for causing a computer to execute a method comprising:

- calculating from a time series $s(t)$ of said measurement signal a characteristic variable for said measurement device;

- comparing said characteristic variable with previously recorded reference values for said measurement device; and

- using said comparison as the basis to automatically generate a message as to whether said measurement device has been installed according to the manufacturers instructions so as to eliminate disturbing effects.

31. (Previously Presented) The computer program product of claim 30 wherein measurement device is more than one measurement device and said measurement values related to each of said more than one measurement device are recorded in

advance and associated on a device related basis to a respective one of said more than one measurement devices and said instructions for causing a computer to execute a method further comprise automatically producing from said comparison an installation standard as said message for at least one of said more than one measurement devices and indicating said message on said at least one device.

32. (Previously Presented) The computer program product of claim 30 wherein measurement device is more than one measurement device and said measurement values related to each of said more than one measurement device are recorded in advance and associated on a device related basis to a respective one of said more than one measurement devices and said instructions for causing a computer to execute a method further comprise automatically producing from said comparison an installation standard as said message for at least one of said more than one measurement devices and transmitting said message to a higher level system where said message is indicated.

33. (Previously Presented) The computer program product of claim 31 wherein said instructions for causing a computer to execute a method further comprise automatically generating said message as a full text message.

34. (Cancelled)

35. (New) The method of claim 15 wherein said measurement device is a vortex flow measurement device and said characteristic variable is a diffusion constant of a phase angle ϕ of said measurement signal.

36. (New) The measurement device of claim 22 wherein said measurement device is a vortex flow measurement device and said characteristic variable is a diffusion constant of a phase angle ϕ of said measurement signal.

37. (New) The computer program product of claim 30 wherein said measurement

device is a vortex flow measurement device and said characteristic variable is a diffusion constant of a phase angle ϕ of said measurement signal.

REMARKS

Claims 25, 26 and 34 have been cancelled. New claims 35-37 have been added. In the Office Action, the Examiner rejected claims 15-18, 21-24, 26-28 and 30-34 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,539,313 to Bornemann. The Examiner further rejected claims 19, 20, 25, and 29 under 35 U.S.C. §103 as unpatentable over Bornemann in view of "The Development of a Wireless Modular Health Monitoring System for Civil Engineering" by Lynch. The Applicant respectfully disagrees with the Examiner.

Bornemann is directed toward a method of testing the installation of a working tool on a numerically controlled universal milling or drilling machine having an automatic tool changing device. Col. 2, Ln. 56-58. When a tool change is accomplished (either manually or automatically) the work spindle is accelerated to a reference speed of rotation. Col. 3, Ln. 13-15. The current uptake of the drive motor is measured and compared to a reference curve for acceleration of the work spindle with and without a tool fitted thereon. Col. 3, Ln. 14-16. In this manner, it is determined whether a tool is coupled to the work spindle. Col. 3, Ln. 27-28. A mass inertia J_1 of the installed tool is also determined based on the value measured during the tool acceleration. Col. 3, Ln. 39-41. This inertia value J_1 is then compared to an inertia value J_2 calculated based on geometric data stored in the machine controller. Col. 3, Ln. 63-67; Col. 4, Ln. 1-3. In this manner, it is determined whether the tool is mounted in a manner that would cause imbalance.

In the presently invention, a method of monitoring the installation of a *measurement device* is claimed. Specifically, claim 15 requires that a characteristic variable for the measurement device be calculated, and that that characteristic variable be compared to previous recorded values to generate a message indicating whether the measurement device is installed correctly. Bornemann teaches a method of testing the installation of a *work tool*, and not a measurement device as presently claimed. A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*,